



**RETURN BIDS TO:**

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Bid Receiving - PWGSC / Réception des soumissions -  
TPSGC

11 Laurier St. / 11, rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau

Québec

K1A 0S5

Bid Fax: (819) 997-9776

**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise  
indicated, all other terms and conditions of the Solicitation  
remain the same.

Ce document est par la présente révisé; sauf indication contraire,  
les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**

Ship Construction, Refit and Related  
Services/Construction navale, Radoubs et services  
connexes

11 Laurier St. / 11, rue Laurier

6C2, Place du Portage

Gatineau

Québec

K1A 0S5

<b>Title - Sujet</b> LOI/RFI - In water vessel cleaning	
<b>Solicitation No. - N° de l'invitation</b> EN600-19LOI1/A	<b>Amendment No. - N° modif.</b> 003
<b>Client Reference No. - N° de référence du client</b> EN600-19LOI1	<b>Date</b> 2019-12-06
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$SMC-044-27486	
<b>File No. - N° de dossier</b> 044mc.EN600-19LOI1	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-12-17</b>	<b>Time Zone</b> Fuseau horaire Eastern Daylight Saving Time EDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Remillard, Michele	<b>Buyer Id - Id de l'acheteur</b> 044mc
<b>Telephone No. - N° de téléphone</b> (613) 850-1431 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

Instructions: See Herein

Instructions: Voir aux présentes

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> Raison sociale et adresse du fournisseur/de l'entrepreneur	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

Standing Offer No. - N° de l'offre  
EN600-19LOI1/A  
Client Ref. No. - N° de réf. Du client  
EN600-19LOI1/A

Amd. No - N° de la modif.  
003  
File No. - N° du dossier  
044MC EN600-19LOI1

Buyer ID – Id de l'acheteur  
044MC  
CCC No/N° CCC – FMS No/N° VME

### **Amendment 003**

**This amendment to the Request for Information is raised to provide answers to questions raised at the Webex Presentation November 25 and December 5, 2019.**

#### **Question and Answer Series I**

Q1. Is the period of the contract or proposed procurement tool the same for DND and CCG?

A1. Yes.

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Q2. Should Canada think about having a smaller particulate filtration requirement to capture all the biocidal effluent? In our experience, though effluent testing we have seen toxins in the water at 15 microns. We suggest that micron fall between 1 to 5 to avoid the release of toxin in the water.

A2. Biocides released from coating systems are typically much smaller than 15 micron. When the formal solicitation is posted on buy and sell Canada, the statement of work will include a secondary filtration requirement that addresses the biocidal concentration within the effluent based on what the acceptable biocidal concentration release rate is.

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Q3. Will a copy of the presentation be provided?

A3. Yes, see additional attachments to this amendment.

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Q4. What is the ultimate goal of the RFI? Is it for grooming for cleaning services?

A4. Both would be optimal and may be included in the final solicitation document as separate streams of competition. Ideally, Canada will have ships cleaned immediately upon return from service and then groomed again if stationary for any length of time before being deployment. Systems should be designed to be stationary at one port of call or one that can be used anywhere in the world. Only the groomer might be needed to travel with the vessel on long missions, being able to be used by the crew.

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Q5. When you talk about hull grooming, is the capture still required?

Standing Offer No. - N° de l'offre

EN600-19LOI1/A

Amd. No - N° de la modif.

003

Buyer ID – Id de l'acheteur

044MC

Client Ref. No. - N° de réf. Du client

EN600-19LOI1/A

File No. - N° du dossier

044MC EN600-19LOI1

CCC No/N° CCC – FMS No/N° VME

A5. Grooming systems do not need to have capture capability as long as they can ensure it was a clean hull before being groomed.

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Q6. Am I correct in stating that micro fouling would not need to be captured, only macro fouling?

A6. This is accurate

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**All other terms and conditions remain unchanged.**



Serving  
GOVERNMENT,  
serving  
CANADIANS.

Au service du  
GOUVERNEMENT,  
au service des  
CANADIENS.

# Request for Information

## In-Water Vessel Cleaning Services

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WebEx Presentation  
5 December 2019



Public Services and  
Procurement Canada

Services publics et  
Approvisionnement Canada



Canada

# Presentation Outline

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- Disclaimer
- Intent of Request for Information
- Introduction to panel
- Overview of requirement
- Procurement Tools, Contracts, Standing Offers, Supply Arrangements
- Moving Forward
- Questions



# Disclaimer

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This presentation is not a bid solicitation and a contract will not result from it. Furthermore, this presentation does not create an obligation for Canada to issue any procurement request, and does not bind Canada legally or otherwise, to enter into any agreement or to accept or reject any suggestions. This presentation and the supporting information is unclassified information containing facts and opinions which the authors alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the DND.



# Intent

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## The Government of Canada in collaboration with partner departments:

- Department of National Defence (DND),
- Canadian Coast Guard (CCG),
- Department of Fisheries and Oceans (DFO),
- Transport Canada (TC)
- Royal Canadian Mounted Police (RCMP),
- Parks Canada (PC), and
- Canada Border Services Agency (CBSA)
- Environment and Climate Change Canada (ECCC)

Is seeking to develop a National Strategy and Procurement tool(s) to provide in-water vessel cleaning services for government wide use.

\* This tool may be extended for use to all provinces, territories and MASH sectors (Municipalities, Academic Institutions, Social Services and Health institutions) in Canada.



# Purpose

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- Collaboratively explore current and emerging technologies
- Modernize the current way in which vessel cleaning is undertaken in an environmentally responsible manner
- Provide Industry with the opportunity to provide views/feedback on existing and emerging technologies



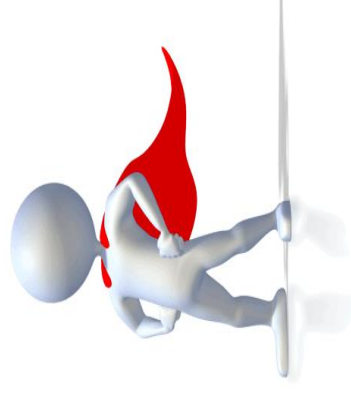


# Introduction - Panel

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## Marine Chartering Strategic Initiatives Sector, PSPC

- ✦ Marc Baril, A/Director
- ✦ Dianne Tinkess
- ✦ Michele Remillard



## Technical Panel

- ✦ Adam Valenta, DND
- ✦ Wendy Simmons, TC
- ✦ Andre St.Laurent, DFO
- ✦ David Taillefer, Environment and Climate Change

Canada



# Cause of Action

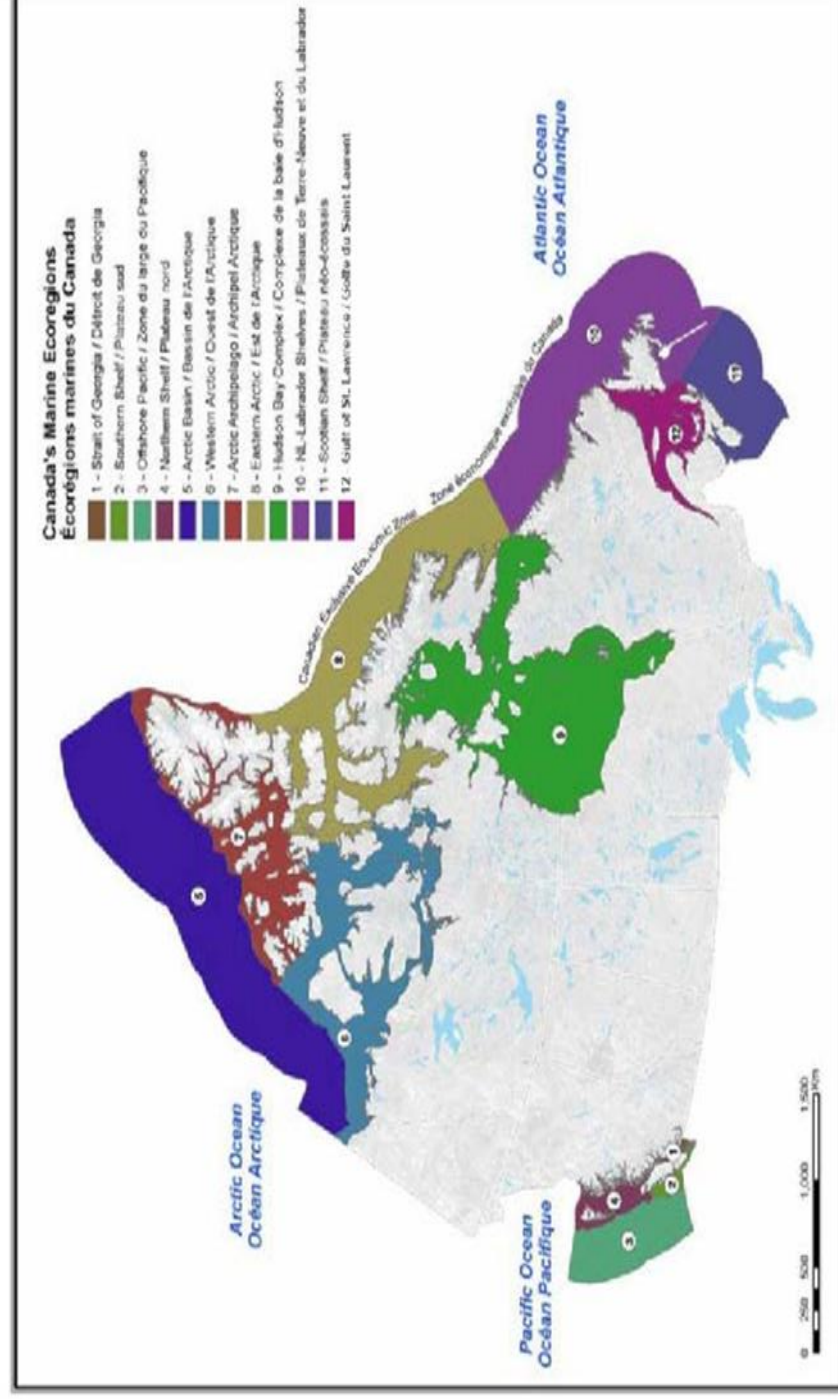
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## The Problem:

- Transfer of invasive species identified as significant threat to marine biodiversity;
- Canada has 12 distinct Ecoregions;
- Increasing shipping trends + climate change = increased species translocation



# Cause of Action



# Cause of Action

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The Government of Canada seeks cleaning solution(s) that meet the following criteria in an environmentally friendly manner.

## Objectives:

- Reduce bio-fouling
- Minimize the transfer of non indigenous invasive species
- Protect the Marine environment
- Capture and dispose fouled water
- Ensure the protection of biofouling paint during the process
- Ensure that the cleaning effluent captures any chemical or biological debris greater than 15 micrometers (microns)



# Cause of Action

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## INTENT

- Continuous hull monitoring
- Protective hull cleaning program
  - Mitigate invasive species transfer
  - Maintaining optimum propulsion efficiency
- Satisfy “clean hull” requirements in territorial waters that have strict biosecurity policies
- Meet or exceed spirit and intent of domestic and/or international regulations



# Cause of Action

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## Why is it important?

- Environmental
  - Legislative;
  - Due diligence;
  - Public Relations
- Operational
- Financial



# Cause of Action

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## LEGISLATIVE / POLICY FRAMEWORK

### MARPOL

- 2001 – International Convention on the Control of Harmful Anti-Fouling Systems on Ships
- 2004 - International Convention on the Control and Management of Ships' Ballast Water and Sediments (Entry into force 8 Sept. 2017)
- 2011 - Guidelines For The Control And Management Of Ships' Biofouling To Minimize The Transfer Of Invasive Aquatic Species
  - Under review



# Cause of Action

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## LEGISLATIVE / POLICY FRAMEWORK

### **International Legislation**

- 1993 - *New Zealand Biosecurity Act*
- 2014 - *New Zealand Craft Risk Management Standard*
- 2015 – *Australia Biosecurity Act*

### **National Legislation**

- 1985 - *National Defence Act*
- 2015 - *Fisheries Act* – Applicable to DND
- 2015 - *Aquatic Invasive Species Regulations*

### **Internal DND Policy**

- Naval Materiel Environmental Performance (NMEP) Policy
- DAOD 4003-0 Environmental Protection and Stewardship
- NAVORD 1002-0 RCN Safety and Environmental Program Management





# BENEFITS

## Hull Fouling and Fuel Economy

Condition	%Roughness (µm) (Shultz 2007)	% ΔSP at 15 knots SP=Shaft Power (Shultz 2007)	%Increase fuel Consumption (Walker & Atkins 2007)
Newly applied coating	150	2 %	-
Deteriorated coating or light slime	300	11 %	~ 6 %
Heavy slime	600	21 %	12 %
Small calcareous fouling	1000	35 %	18-24 %
Medium calcareous fouling	3000	54 %	61 %
Heavy calcareous fouling	10,000	86 %	92 %

# Potential Scope

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## Department of National Defence

- Domestic and International service required
- Use of magnetic equipment is strictly prohibited
- Variety of vessel classes

## Coast Guard

- Domestic services required
- Variety of vessel classes



15







# CANADIAN COAST GUARD FLEET

## CANADIAN COAST GUARD FLEET

### AIR CUSHION VEHICLE



Tonnage: N/A  
Commission: 1998-2014  
Crew: 6  
Length: 28.5m  
Vessels in Class: 4  
Cruising Range: 45nm

### CHANNEL SURVEY AND SOUNDING VESSEL



Tonnage: 15  
Commission: 1970-2019  
Crew: 10  
Length: 12  
Vessels in Class: 4  
Cruising Range: 16nm

### HIGH ENDURANCE MULTI-TASKED VESSEL



Tonnage: 3800  
Commission: 1970-87  
Crew: 52  
Length: 83m  
Vessels in Class: 7  
Cruising Range: 8200nm

### HEAVY ICEBREAKER (TERRY FOX)



Tonnage: 5000-11000  
Commission: 1969-83  
Crew: 46  
Length: 88m  
Vessels in Class: 1  
Cruising Range: 20000nm

### MEDIUM ENDURANCE MULTI-TASKED VESSEL



Tonnage: 1900  
Commission: 1969-85  
Crew: 48  
Length: 57.7m  
Vessels in Class: 3  
Cruising Range: 3300nm

### MEDIUM ICEBREAKER



Tonnage: 6000  
Commission: 1978-2018  
Crew: 62  
Length: 98m  
Vessels in Class: 5  
Cruising Range: 35000nm

### MID-SHORE PATROL VESSEL



Tonnage: 253  
Commission: 2013  
Crew: 18  
Length: 42.8m  
Vessels in Class: 10  
Cruising Range: 2000nm

### MID SHORE SCIENCE VESSEL



Tonnage: 400  
Commission: 1967-92  
Crew: 2  
Length: 13.4m  
Vessels in Class: 4  
Cruising Range: 250nm

### SAR LIFEBOAT (CAPE)



Tonnage: 33.8  
Commission: 1999-2011  
Crew: 8  
Length: 14.6m  
Vessels in Class: 36  
Cruising Range: 200nm

### NEARSHORE FISHERY RESEARCH VESSEL



Tonnage: 211  
Commission: 1989-2012  
Crew: 10  
Length: 22m  
Vessels in Class: 4  
Cruising Range: 1200nm

### HEAVY ICEBREAKER (LOUIS ST LAURENT)



Tonnage: 11400  
Commission: 1969  
Crew: 84  
Length: 120m  
Vessels in Class: 1  
Cruising Range: 23000nm

### OFFSHORE FISHERY SCIENCE VESSEL



Tonnage: 2400  
Commission: 1982-88  
Crew: 42  
Length: 50.3m  
Vessels in Class: 2  
Cruising Range: 3000nm

### SPECIAL NAVAIDS VESSEL



Tonnage: 600  
Commission: 1979-89  
Crew: 20  
Length: 49m  
Vessels in Class: 2  
Cruising Range: 7700nm

### SPECIALTY VESSEL



Tonnage: <100  
Commission: 1980-2013  
Crew: Varies  
Length: Varies  
Vessels in Class: 14  
Cruising Range: Varies

### OFFSHORE FISHERY SCIENCE VESSEL (NEW)



Tonnage: 3212  
Commission: 2018-2020  
Length: 63.4m  
Vessels in Class: 3

### TRAINING VESSEL



Tonnage: 17.4  
Commission: 1985  
Crew: 8  
Length: 13.5m  
Vessels in Class: 1  
Cruising Range: 150nm

### OFFSHORE OCEANOGRAPHIC SCIENCE VESSEL



Tonnage: 3000  
Commission: 1964-83  
Crew: 62  
Length: 90.4m  
Vessels in Class: 2  
Cruising Range: 23100nm

### OFFSHORE PATROL VESSEL



Tonnage: 1200-2400  
Commission: 1968-87  
Crew: 38  
Length: 62.5  
Vessels in Class: 5  
Cruising Range: 10000nm

### SAR LIFEBOAT (BAY)



Tonnage: 100.2m  
Commission: 1989-2018  
Crew: 8  
Length: 19m  
Vessels in Class: 15  
Cruising Range: 250nm

# Potential Scope

## Royal Canadian Navy Vessels

<b>HALIFAX (HFX) Class</b> <ul style="list-style-type: none"><li>• 4,770 tonnes</li><li>• Length: 134m</li><li>• Beam: 16.4m</li><li>• Foul release / Antifouling</li></ul>	<b>KINGSTON (KIN) Class</b> <ul style="list-style-type: none"><li>• 970 tonnes</li><li>• Length: 55m</li><li>• Beam: 7.6m</li><li>• Foul release / Antifouling</li></ul>	<b>ORCA Class</b> <ul style="list-style-type: none"><li>• 210 tonnes</li><li>• Length: 33m</li><li>• Beam: 8.6m</li><li>• Foul release / Antifouling</li></ul>
<b>VICTORIA (VIC) Class</b> <ul style="list-style-type: none"><li>• Length: 70m</li><li>• Beam: 8m</li><li>• Foul release</li></ul>	<b>HARRY DEWOLF (HDW) Class</b> <ul style="list-style-type: none"><li>• 6,440 tonnes</li><li>• Length: 103m</li><li>• Beam: 19m</li><li>• Epoxy ice capable coating</li></ul>	<b>Joint Support Ship (JSS)</b> <ul style="list-style-type: none"><li>• 20,240 tonnes</li><li>• Length: 173.7m</li><li>• Beam: 24m</li><li>• Foul release / Antifouling</li></ul>
<b>Canadian Surface Combatant (CSC)</b> <ul style="list-style-type: none"><li>• 6,900 tonnes</li><li>• Length: 149.9m</li><li>• Beam: 20.8m</li><li>• Foul release / Antifouling</li></ul>	<b>Current Fleet Status</b> <ul style="list-style-type: none"><li>• HALIFAX Class—12 ships</li><li>• KINGSTON Class—12 ships</li><li>• VICTORIA Class—4 subs</li><li>• ORCA Class—8 ships</li><li>• HDW Class—1 ship (soon)</li></ul>	<b>Future Fleets</b> <ul style="list-style-type: none"><li>• HDW Class—5 ships</li><li>• JSS—2 ships</li><li>• CSC—15 ships</li></ul>





# Procurement Tools

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- A contract is a binding arrangement between Canada and suppliers under predetermined terms, conditions, and price
- A Supply Arrangement is a non-binding arrangement between Canada and pre-qualified suppliers that allows departments and agencies to award contracts and solicit bids from a pool of pre-qualified suppliers for specific requirements.



# What is a Standing Offer?

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- A Standing Offer (SO) is a non-binding arrangement between Canada and a pre-qualified supplier
- The intent of a Standing Offer is to establish a procurement tool that permits expeditious processing of individual requirements
- Standing Offers are issued following a Request for Standing Offer Process (RFSO) which provide a suitable pool of suppliers that meet the stated evaluation criteria at pre-determined prices
- Call-ups are issued to the suppliers as requirements arise



# Moving Forward

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- A solicitation will be issued to Buy and Sell
  - Target date: Winter of 2020
- Solicitation will be posted for 40 days.
- Supply Arrangement/Standing Offer/Contract expected to be awarded
  - Target date: Summer of 2020
- The initial period of the supply arrangement/standing offer/contract will be for 2 years with additional options to extend the agreement for 2 additional, one year periods

\* Dates are subject to change



# Questions

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Questions??





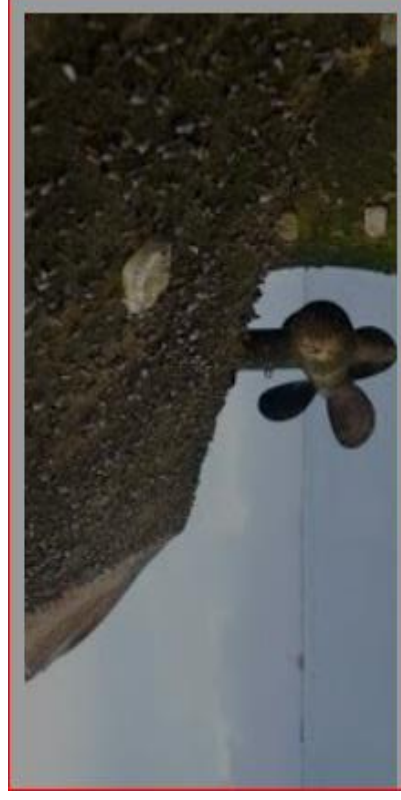


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# Contact:

[TPSGC.PAGCM-APMCM.PWGSC@tpsgc-pwgsc.gc.ca](mailto:TPSGC.PAGCM-APMCM.PWGSC@tpsgc-pwgsc.gc.ca)



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